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THE ROLE OF THE ARCHAEOLOGIST IN THE
CONSERVATION-PRESERVATION PROCESS

by

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THE ROLE OF THE ARCHAEOLOGIST IN THE CONSERVATION-PRESERVATION PROCESS

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As the interest in the conservation, preservation, and interpretation of historic sites and structures continues to increase there is an increased awareness of the need for archaeological research in addition to traditional historical documentation. In our efforts at perpetuating our historical heritage from the physical remains that have survived we are looking to the documentation lying beneath the surface to provide evidence not obtainable from written documents. Historians and architects are now looking to the archaeological record for the reconstruction of specific architectural and historical clues in the form of structural and artifactual details. Anthropologists are examining patterns of archaeological data and reconstructing the processes of cultural dynamics represented by the artifact, with more scientific rigor than ever before attempted. As a result there is an ever increasing emphasis on the complete examination of the total documentation relating to an historic property, architectural historical and archaeological, in order to properly execute the conservation-preservation process.

Archaeology can contribute certain types of specific information relative to a particular place, such as the details of architectural features as well as pinpointing their exact location, their temporal relationship, and something of the use to which the structure was put; but archaeology is limited in its contribution outside the technological

area. Archaeology sometimes makes a considerable contribution to our understanding of the technology of particular crafts at various periods of time through the excavation of shops and industrial waste sites. The waste casting sprues and fragments of castings from a brass foundry or silversmith shop, or the kiln waster dump of a potter's shop, are valuable repositories for information relating to the evolutionary development of these technologies. Our attention tends to become focused on these sites due to their value to the archaeologist. Such sites are those which he can "get his teeth into", as well as his trowel, in that they lend themselves to quantification and stratigraphic analysis as well as their basic "time capsule" character.

There are other sites which do not so dramatically yield positive results. For instance, at the town of Bethabara in North Carolina, an eighteenth-century Moravian settlement, the maps and records revealed the location of the gunsmith shop, the Brothers' House, the blacksmith's shop, the millwright's house, the tailor shop, the Gemein Haus (church), the apothecary shop, the doctor's laboratory, and the pottery shop. With the exception of the pottery shop, the excavation of all of these ruins did not reveal a single clue that would have been sufficient to allow the archaeologist to properly interpret the use of these structures! This would appear to be a somewhat dismal record for archaeology, were there not other questions of interest than the limited one involving the specific function a particular structure served within the community of which it was a part.

Architectural details such as walkways, doorways, outbuildings, drainage systems, and landscaping can be determined through excavation

around standing structures as well as in the sub-surface remains of historic ruins. The work at the Paca House in Annapolis, Maryland is an example of the use of research specialists in history, landscaping, architecture, and archaeology in an integrated manner to carry out the conservation-preservation-restoration-interpretation process.

One of the primary questions archaeology can answer is that involving the temporal relationships between the various occupations on the historic site being examined. Studies of recovered artifacts in context from archaeological sites are made emphasizing the association of certain artifact types with particular individuals or structures. This emphasis is frequently found in research for restoration, where concern is often with one historical figure associated with an historic site. There is a broader study, however, that is also of concern to the archaeologist in terms of artifact analysis. This is his interest in establishing general relationships between artifacts in time and space which will be of value in future excavation interpretation by archaeologists, and will have a feed-back value on a broader level than that relating to a specific individual or site. The one relates closer to history in its concern with specifics, and the other to science in its general application.

The scientific approach is seen in a recent study of ceramics recovered from eighteenth-century British American sites wherein a mathematical formula is used to determine a mean ceramic date for the ceramic sample. This data is then compared with the known occupation period of the site, and in many cases has been found to correspond remarkably well with the known median occupation date (South 1972). This success in the

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application of a mathematical formula to archaeological data is explained in terms of the horizon concept involving a broad and rapid spread of ceramics from British sources in the eighteenth century (Willey and Phillips 1958:31-34). Studies such as this involving statistical treatment of archaeological data are being undertaken with greater frequency than ever before to expand and test our data-recovery from historical sites, and to construct hypotheses for examining the processes of cultural dynamics.

Bone, seeds, pollen, and cysts from human and animal parasites recovered from garbage dumps, privies, and cesspools have just begun to reveal their data through archaeological recovery and analysis. Questions relating to social and health conditions, disease, parasites, diet, the source and availability of food in relation to the ecology of the area, as revealed through archaeology and correlated with the historical references, are increasingly being asked by social scientists. Archaeologists are meeting this broader challenge, allowing a more penetrating view into some of the areas of past patterned human behavior than has hitherto been possible through dealing with the traditional archaeological materials. The archaeologist has an increasingly expanding responsibility to inquire beyond the mere validation of an historic site through correlation with documentary evidence; beyond merely listing the presence or absence of artifact types for establishing the temporal position of the site; beyond the revealing of architectural features for the purpose of reconstruction and restoration; beyond exposing ruins for the entertainment of the visiting public to historic sites; and beyond the process of recovery and preservation of relics from the past hoarded

into repositories and museums! His view must be as broad as the questions being asked by archaeologists, sociologists, anthropologists, ecologists, biologists, archaeo-parasitologists and other scientists who are increasingly turning to archaeology to reflect some light on their special problems and spheres of interest. However, although archaeology is broadening its scope, the primary emphasis will continue to be in the area of material culture where so much must still be explored on the basic level of typology and stratigraphy in order to arrive at a better understanding, definition and temporal position of artifacts of many types found on historical sites.

Our discussion here has emphasized the broader role and goals of archaeology in the conservation-preservation process. These goals prevail regardless of the more limited objectives often motivating the sponsors of archaeological research. Sponsors of archaeological research are usually interested in:

1. the validation of the historic site in relation to documents
2. the discovery of architectural features
3. the determination of the occupation sequence of the site
4. the determination of the temporal occupation of the site
5. the recovery and preservation of artifacts associated with occupation of the site
6. the development of the site as an historical exhibit

Motivations for these interests are oriented toward restoration, and reconstruction, or exposing ruins for public viewing and obtaining relics for exhibit purposes. In this activity the archaeologist plays a major role if he is to fulfill his responsibility to the historic site he has researched. His report, and the suggestions in the form of site development guidelines, when combined with the historical and architectural documentation, form the foundation upon which the historic site is

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developed and interpreted. An important role for the archaeologist is often one of public indoctrination in the importance of historical preservation (Harrington 1965:8). He often finds that the archaeological document he is revealing does not coincide with the preconcieved plans made by the sponsors of the research on the historic property. To remain true to the archaeological data revealing foundations for brick structures he may find himself embroiled in a fight to keep "typical" log cabins from being moved onto the site, and this conflict is often with the group sponsoring the archaeological research. However, if he disdains such involvement and limits his contribution strictly to his archaeological report, then he is not completely fulfilling his role in the conservation-preservation process.

In our role as stewards of the past our efforts should be directed toward achieving the greatest degree of accuracy in our historical, architectural and archaeological research, to insure the closest correlation between the reality of the past and our explanatory exhibits. These historic structures and sites, restored parapets and palisades, cabins and ruins, are the bridges leading the minds of men to a greater appreciation of our heritage. We must not fail in our role as historical engineers who are shaping the attitudes and understanding of generation yet unborn. For it is only through what we do today, in developing our historic sites, that the future can know the past. If we, in our enthusiasm, and in the name of history and "restoration," damage, destroy and distort the clues that have survived, rather than competently interpreting them, we have burned the bridges behind us and the future can no longer build on the true evidence, but must forever depend on our interpretation. We, the researchers and developers of his-

toric sites, are the only ones who have the opportunity of observing the maximum amount of historical, architectural and archaeological evidence. Once the pages in the earth have been revealed through archaeology, there is never another chance for those pages to be read, for the archaeological process itself is a destructive force, erasing as it reveals. There is no second chance!

We should guard against first-impulse planning and development; against the log cabin syndrome, where the countryside is stripped of all log cabins, to be planted in a cluster like pseudo-historical mushroom towns springing up overnight, regardless of the historical focus or archaeological merit a site might otherwise possess. Yet the minds of children and unsuspecting adults are shaped by such distortions, that are springing full-blown as creations of our own age rather than anchored in the past through research and archaeology.

Let us guard against the pitfalls of creating "instant history," insufficiently rooted in the rich humus of our heritage of people, their things, and the historic sites that were the stage for their drama. Rather, as we engineer our explanatory exhibits in the form of parapets and palisades, ruins and cabins, restorations and reconstructions on historic sites, we should be constantly aware of our role as creators of historical images to become burned into the minds of men. If our efforts to interpret history on historic sites are insufficiently supported by research and archaeology, and we find that the palisade we built must be taken down in favor of a more accurate presentation, the damage has already been done by false images carried away by all those who have viewed the bastard child.

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Therefore, we should look closely at our responsibility. These are not games we are playing with history! Our involvement in the past is our investment in the future!

We turn now from the role of the archaeologist in the broad view of the conservation-preservation process to conservation and preservation on the specific level of the conservator and the field archaeologist. The archaeologist is faced with the same conservation-preservation problems relating to treatment of archaeologically recovered artifacts with which the conservator must deal. In many instances the archaeologist must act as his own conservator and preservationist when his program cannot afford the luxury of a staff conservator. Our concern here will not be with those problems thus shared by the archaeologist and the conservator, but with those unique challenges that face the archaeologist in the field.

In many cases the archaeologist can ruin data of value to the conservator through careless or uninformed handling of archaeological materials. For instance an overglazed enamelled porcelain fragment taken from the wet earth can have its entire delicate pattern removed in an instant by an uninformed worker who "cleans" the soil from the sherd with his thumb. Similarly, in removing a delft bowl fragment lying in damp soil the entire tin-enamelled glaze will sometimes separate from the sherd body as the sherd is lifted. In such cases immediate steps must be taken to bond the in-situ glaze to tissue to allow it to be removed intact to be later restored to the body of the vessel. Some tinned sheet iron is so delicate and decayed in situ in the earth that steps must be immediately taken to bond the pie-crust type flakes of the

object to strengthen it for removal to the laboratory for further treatment and preservation (South 1971:60). Many similar examples of the need for care in the field can be mentioned.

Some of the archaeological data is of such delicate nature, such as posthole, postmold and pit outlines, that traditionally these features have only been recorded, photographed and excavated. However, by means of polyurethane and fiber-glass resin, profiles of archaeological features can be directly lifted from the earth and carried to the museum for exhibit purposes, or as teaching aids into the classroom, where students can have practice in drawing a true soil profile before ever going into the field (South 1970:3).

Delicate charcoal features such as pits full of corncobs can be successfully removed intact from the field by excavating around the pit and removing it on a supporting framework after impregnating the carefully cleaned cobs with polyurethane resin and soaking this material into the soil matrix of the feature. Such techniques using various impregnating-solidifying solutions have long been used in archaeology to remove delicate objects from a field matrix, particularly in removal of skeletal material. However, in this case the decision must be made by the archaeologist as to whether he desires to obtain a radiocarbon date from the bones or the charcoal, since any solutions used to strengthen the bones will render them useless for obtaining radiocarbon dates. This caution is also in effect regarding the laboratory conservator who can easily contaminate a sample through careless or uninformed cleaning, treatment, or storage of archaeological materials that may eventually need to be dated through radiocarbon or other analysis.

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The architect is aided in restoration studies through the archaeological recovery of plaster and paint details from ruins, as well as iron hardware. The restorationist concerned with furnishings can derive a wealth of information regarding ceramic and glassware furnishings of the structure from archaeological fragments. If a well or other feature below water is excavated, artifacts from this situation will survive very much intact, including wood, leather, cloth and other usually perishable objects. In such situations the archaeologist and the conservator have their hands full with preservation problems both in the field and the laboratory. Underwater archaeology presents an entire complex of problems of preservation that must be solved before such items can become part of an interpretive exhibit. In all cases, but especially in dealing with underwater sites, there must be sufficient funding before the work begins to provide for the proper recovery and preservation of important historic objects.

The role of the archaeologist in the conservation-preservation process is a broad one, involving as it does an intimate involvement with the master planning, the basic historical research, architectural research, artifact research, scientific analysis, artifact preservation and historic site development, as well as revealing the archaeological document. However, the direction now is no longer that of a single individual attempting to handle all these aspects alone. Rather, the archaeologist, the architect, the restoration specialist, the administrator, the historian and the conservator, as well as the contractor, are now working together on many projects to effect the same goal in the conservation-preservation process, "To preserve the physical remains of

our past and to employ them in perpetuating our historical heritage" (Harrington 1965:8).

The traditional training for archaeologists has come through classics departments for classical archaeology, and from anthropology departments for archaeology of early man. Most American archaeologists have received their training in anthropology departments, but more recently an interest in historical archaeology has resulted in schools of American studies, and various history departments offering courses in historical archaeology. Summer field schools and workshops are now being offered with greater frequency to help fill the ever expanding demand for competent archaeologists able to deal with sites on both the prehistoric and historic levels.

The Society for American Archaeology is the primary American professional organization devoted to American archaeology in the prehistoric period, and is the publisher of American Antiquity. The journal Archaeology, dealing with the antiquity of the world, is published by the Archaeological Institute of America. In 1960 The Conference on Historic Site Archaeology was founded to publish papers presented by archaeologists dealing with historic sites. The papers from all conferences have been published, and are presently published as The Conference on Historic Site Archaeology Papers. In 1967 The Society for Historical Archaeology was begun, and this organization publishes the journal Historical Archaeology. Information concerning these publications follows:

American Antiquity. For information and publications send to
Society for American Archaeology, 1703 New Hampshire Ave.,
N.W., Washington, D. C. 20009.

Archaeology. For information and publications send to Archaeological
Institute of America, 100 Washington Square East, New York, N. Y.
10003.

Historical Archaeology. For information and publications send to
Roderick Sprague, Secretary Treasurer, Department of Sociology/
Anthropology, University of Idaho, Moscow, Idaho 83843.

The Conference on Historic Site Archaeology Papers. For information
and publications send to Stanley South, Editor, Conference on
Historic Site Archaeology, Institute of Archeology and Anthropology,
University of South Carolina, Columbia, S. C. 29208.

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